



newsletter

The management
Newsletter for all
industries involved
with bar-code
scanning and
related
technologies.

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The Distribution Symbology Study Group....

....held its important working meeting on Oct. 12 in Chicago at the headquarters of the Fibre Box Association. (The location is worth noting. The FBA has come around full circle from strident opposition to printed bar codes on shipping containers, to full support for the efforts of this worthy group.)

The meeting was attended by "users" (product manufacturers), corrugated converters, plate makers, film master manufacturers, ink producers, AIM members (scanner manufacturers) and key trade association representatives.

Print runs of test symbols were completed by 9 corrugated converters with results representing different printing techniques, various inks and colors, different plate materials, varying board weights and both press and crosspress directions. These were all of the factors which the Group had decided could possibly affect the ultimate scannability of the symbol.

Each of the hundreds of samples was coded and then sent to Photographic Sciences to be analyzed on a specially programmed AutoScan verifier. The test symbol consisted of bars and spaces of .030", .060" and .090". The tests were run to measure the variations in bar/space width and the color contrast.

The results were then distributed to the DSSG members to review, take home and report back on their evaluation from the point of view of the industry they represented (i.e. user, converter, hardware, ink, etc.). These results and comments will then be incorporated into an interim report to be distributed to DSSG members and to the industry. This is expected to be completed in December 1978.

But we can tell you of some unofficial, preliminary reactions by some of those present at the meeting:

1. Bar/space dimensions can be kept within reasonable limits for printing scannable bar codes.
2. A symbol with only 2 bar/space widths stands a much better chance to be printed on container board and scanned accurately, than a multiple width symbol such as the UPC/Distribution Symbol configuration. A wide to narrow bar width ratio of about 2.5:1 or 3:1 would be a reasonable choice.
3. Color contrast is much less of a problem than originally anticipated. Almost all board reflectance readings were in the upper 30% range. The reflectance ratio of the printed bars to the board was consistently

more than 4:1, which is the minimum required by the scanner manufacturers.

And what of the future plans of the DSSG? They now seem on the verge of pulling it all together. Their goal will be to publish their results describing the tests and outlining the parameters of a symbol that will work. Although they will not specify a designated symbol configuration, which will be left to each industry, they will narrow down the selection considerably. It will then be the decision of the industry groups to determine if they can, or want to, settle on a single universal symbol. The grocery industry, in particular, has been keeping close watch on the Group's work and will probably move quickly when the results are in.

Decisions will have to be made as to whether an all-numeric or alpha-numeric code should be adopted. Will there be allowances for supplemental codes that each company can use to expand the symbol to reflect internal requirements? Will the additional costs to print the bar code be significant? (The FBA plans to study these incremental costs and publish their results. The cost impact is expected to be minimal.)

*Not
Under
Study*

Bill Maginnis of Hunt Wesson, who has chaired the DSSG from its inception and has been its driving force, announced at the last meeting that he will chair one more meeting and then step down as chairman, but continue as a member. The responsibilities of a new position at his company won't permit him to put in all of the extra time required to head up the group. He has done a phenomenal job.

Comment

The DSSG has done what had to be done. It took longer than expected because voluntary work, squeezed in between regular job responsibilities by dedicated individuals, always takes longer.

The Group must now complete its work quickly and turn the results over to industry to fill in the gaps and tie down the specifications. The DSSG should not fall into the trap of feeding on itself, constantly finding new areas that need their attention. As with any new technology, the final shake down will occur when the marketplace takes hold and resolves the operating problems in the field.

A new company in Belgium....

....has been formed to market equipment and offer consulting services related to bar code reading and related technologies.

The company is new, but its principal officer is no stranger to bar codes. G. C. Dumont has been active in the industry since 1964 and was present at the founding meeting of the Automatic Identification Manufacturer's Section of MHI. Although he chose to remain in Belgium, he has maintained contact with AIM and has continued his interest in bar codes.

His new company, Codine, is the Belgian representative of products from Trumeter, Rank Optic, Gorden Engineering, F.R. Electronics and MEKontrol. He is also in the process of organizing EuroMEK, which will be the European marketing organization of MEKontrol. In addition to Belgium, EuroMEK will be in operation in Sweden and France shortly.

Codine is seeking new products, related to bar code reading, which are available for representation in Belgium or Western Europe. To contact the company, write: G. C. Dumont, S.A. Codine N.V., Rue du Rivage 34, 1300 Wavre, Belgium. Tel: 010-22-6267.

Photographic Sciences Corp. has been awarded....

....a \$176,000 contract to build reflectance instruments for the United States Postal Service.

As part of its program of automatic sorting and processing of mail, the Postal Service will be using printed envelope bar codes to speed mail handlings and will use the instruments to check whether its customers' bar code-printed envelopes will be readable to automatic mail sort equipment. The codes' readability depends on the existence of sufficient contrast between light reflected from the printed bars and from the surface of the envelope.

Photographic Sciences specializes in the development of many types of bar code symbology, instruments and other quality control devices; and photo-plotting of form slides, targets and reticles used by the micrographics industry. The company also announced the promotion of Sherry Barnum to Marketing Services Manager.

Vidac is an example of a company....

....spawned by UPC technology. Formed in 1973, with the primary purpose to develop a UPC Code Labeler, Vidac units were introduced in 1975.

The company now claims that most of the major chains with scanning installations are using Vidac labelers, and that their customers say "Vidac labels scan better than any others in the store."

Vidac labelers are marketed throughout the US and Europe through distributors, and the company is looking for additional distributors in some open areas. Contact: A.J. Kinard, VP Marketing, Vidac, 1054 Shary Circle, Concord, CA 94518; phone 415/676-4900.

A new Scorepak data entry terminal....

....has been added to the Azurdata product line. The microcomputer-driven, handheld terminal costs less than \$1000 and offers 16K character memory. The company claims significant improvements in price/performance ratio over any terminal currently marketed.

The terminal is housed in a single, compact package contoured to rest in the operator's hand; and innovations in software design allow for an unprecedented choice of bar code reading capabilities. The length of product code and option code are user-selectable and Scorepaks are available to read Codabar, UPC and Plessey. Optimal bar code reading capabilities include the ability to read more than one bar code, or even to automatically distinguish and read Plessey and UPC labels as they appear. Keyboard entry and bar code reading can be mixed in any combination.

This new unit was introduced on Sept. 30, 1978 and is currently in production, with delivery quoted as 30-60 days.

The battle to retain....

....the U.S. railroads' Automatic Car Identification system continues to be waged on many fronts.

Computer Identic's president, David Collins, is pursuing the American Association of Railroads and the Interstate Commerce Commission in the courts (SCAN Oct 77, Nov 77, Jul 78, Aug 78) and that promises to be a long drawn-out battle against very difficult odds.

But General Motors has joined up with proponents of the automated car location system which uses bar code labels on the sides of each railcar. In a letter addressed to the chief executive officers of seven major railroads, GM complains that there has been a drop "from a 97% reporting reliability to.... 70%....since railcars have been produced, or repaired, and put into our service without scanner labels."

With the tens of thousands of railcars used by GM for the transportation of their parts, assemblies and finished products, the company states that the railroad industry is making it difficult to eliminate the problem of poor car utilization. R. E. Hatfield, GM's Director of Operations-Logistics put it very succinctly when he wrote, "We recognize there are costs associated with the continued labeling of railcars, however, there are costs associated with management controls in all businesses."

Since studies have indicated that the Optical Scanning labels have achieved the 20 year life originally specified, and since a number of the major U.S. railroads have already made commitments to coal industry shippers to continue to label their railcars, GM wants the same action for those railcars put into their service.

Hatfield and GM feel this will allow them to produce better car utilization.

There were a number of interesting articles....

....about UPC in the trade and consumer media this past month. Here's a run-down:

- Time Magazine (10/16/78) headlined their article "The UPC's slow start" and dealt with the equipment manufacturers and their ups and downs. It chronicled those manufacturers who are no longer selling store scanning equipment (GE, RCA, Singer, Bunker Ramo, Pitney Bowes and Sperry Rand), but failed to mention that all but Sperry Rand dropped out years ago when UPC was just getting started. The cost of installation -- \$20,000 per lane -- was cited as the major deterrent to faster growth, but there was no indication of the current increased rate of growth which has been more encouraging to the 4 surviving companies.
- CPDA News (October 1978) from the Council of Periodical Distributor Association, covered the problems with many magazines which are not placing the UPC symbol in the correct lower left hand corner of the

cover. They described how this will confuse the supermarket checkout personnel, and confound the wholesalers' automated return and redemption system. In a separate article CPDA's V.P. George Wright emphasized the importance for publishers to maintain up-to-date UPC number information with their wholesalers and retailers so that price and data files can be kept current.

- Mind Your Own Business (September 78), a British publication, described for its readers the new concept (for the UK) of the UPC/EAN code, how it will function and its advantages to the consumer. This was a well-researched and written article and one of the better efforts we have seen in the press.
- The Christian Science Monitor really blew it. In the October 4, 1978 issue, Rose Mary Winters, a free-lance writer, described UPC as if she had done her research in 1973 and just got around to filing the story. This is a sampling of statements made in the article: "It now seems the supermarkets are not going to computerize the checkouts after all." "After eight years it is being abandoned by most supermarket chains. Whether it will ever be revived is doubtful." "The system would not be totally accurate....is prone to misreading,....electronic malfunctions.. ..(and) even labels straight off the press can be misread." "As of July 1978, fewer than 50 stores have the computerized checkout system in operation....on an experimental basis." "About a year ago supermarket chains stopped discussing the future of the UPC in their stores."

Well this time grocery industry spokesmen went up the wall. Representatives of the UPC Council and the Food Marketing Institute forced the editor of CSM to wire all of the hundreds of newspapers who run syndicated articles from CSM asking them to withhold publication of the article. And on October 17 a new effort, this time by Guy Halverson, CSM Business and Financial correspondent, produced an entirely new article titled "Electronic eye moves into grocery checkout line." This one was factually correct and much more favorable, but made absolutely no reference to the fiasco printed 2 weeks before. It was as if the first article had never happened.

Comment

Unfortunately, our own postscript is that this will continue to happen so long as the responsible industry spokesmen don't recognize the importance of public relations to the entire UPC program. Why not prepare a monthly article, which would be of interest to the consumer editors of newspapers and magazines? It would be readily picked up and printed, would not be difficult or expensive to distribute -- there are services ready to handle items of this type -- and would prevent a recurrence of silly articles that do a great deal of harm.

DISCUS held its first industry seminar....

....on October 25-26 in Rochester, NY. This was a trial run, of sorts, for the Distilled Spirits Council of the U.S., which is introducing its version of UPC for alcohol beverages (SCAN, Oct 78). The major meetings are scheduled for NYC (11/1), Louisville, KY (11/9-10), Chicago (11/29-30) and San Francisco (12/5-6).

We expect to cover the New York and Louisville meetings in person and will report in greater detail next month.

And we published an incorrect phone number for DISCUS last month. The correct number to reach Dr. Steve Barsby is 202/628/3544.

The quarterly UPC scoreboard....

....reflects the most impressive progress to date.

In the 3 months ended Sept. 30, 1978, there were 96 new stores equipped with UPC scanners -- 41 in September alone, which was a record. This brought the total to 414 stores. The 5 leading chains account for 31% of the national total (Giant-62; Winn-Dixie-27; Wegman's-20; Ralph's-13; Schnuck's-11), but the list of new stores also showed many new names and a number of smaller independents.

As for the equipment manufacturers, the swift pace of NCR is accelerating:

	Third Quarter 1978		Total to Date	
	#	%	#	%
IBM	22	23%	182	44%
NCR	47	49	142	34
Datachecker	17	18	53	13
Sweda	8	8	25	6
Univac	<u>2</u>	<u>2</u>	<u>12</u>	<u>3</u>
	96	100%	414	100%

A major factor in NCR's success during this period was the activity of Winn-Dixie. From a standing start earlier this year, this chain now has 27 stores scanning, of which 21 were installed during the July-Sept. quarter.

Almost 50% of Winn-Dixie's 1150 stores are equipped with the NCR 255 computerized checkout system, and it's a relatively short step to add the scanners.

Overall, NCR has about 5,000 of their 255 systems installed and at the rate at which they are currently adding scanning units, it will not be too long before they pass IBM and take over first place in this foot race.

Offshore UPC activity has surfaced....

....in some unlikely spots.

Piggly Wiggly Ltd. has installed 7 scanning lanes in one of their Bermuda stores, and has ordered additional NCR equipment for 3 more outlets. The total value of these systems -- including a small business computer -- is \$600,000.